AN OPEN ACCESS BUSINESS MODEL FOR CABLE SYSTEMS:

PROMOTING COMPETITION AND PRESERVING INTERNET INNOVATION ON A SHARED, BROADBAND COMMUNICATIONS NETWORK

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At a recent meeting with the Chairman and staff of the Federal Communications Commission (FCC or the Commission), a number of small, independent Internet service providers (ISPs) were asked to develop a business model for open access. The basic principle behind this business model can be stated as follows: Open Access pricing must be based on wholesale tariff principles, just as it has been on the narrow-band Internet.

The meeting, which was requested by the FCC, was stimulated in part by and dealt with the details of a Term Sheet that Time Warner had presented to independent ISPs. This Term Sheet makes it readily apparent, seven months after a promise by AOL Time Warner to provide nondiscriminatory access, that virtually no progress had been made toward that goal. Therefore, a mandatory obligation to provide open access is a critical condition of the merger.

The anti-competitive aspects of the Term Sheet have typified the responses of all cable owners to requests for interconnection, regardless of whether or not they have promised to provide open access. In particular, in spite of the AT&T MindSpring letter of a year ago, little progress toward open access has been made on its systems. Indeed, one of the strongest voices joining the chorus for a mandatory obligation to provide open access in recent weeks has been MindSpring.

Cable companies have proven they will not provide truly nondiscriminatory access voluntarily. If the remarkably competitive and innovative environment of the narrow-band Internet is to be preserved on the broadband Internet, the Commission must make open access a binding obligation. The combination of offline content, the dominant narrow-band Internet service provider and the nation's second largest cable operator in the AOL Time Warner merger makes the need for an open access obligation especially critical as a condition of the merger.

Therefore, we offer the following general principles of open access, equally applicable to the AOL Time Warner merger and in the context of an immediate, general rulemaking. We do so in part using AOL's recommendations for open access made to the city of San Francisco just one year ago.[1]

The presentation of the principles for open access is divided into two parts. The first part presents an analysis of the anti-competitive effect of the Time Warner Term Sheet. It is critical for the Commission to appreciate that the offer bears no relationship to genuinely open access and to understand that without a binding obligation, the process will frustrate competition. The second part presents specific principles for the Commission to implement.

I. THE FAILURE TO PROVIDE OPEN ACCESS

THE ROLE OF SMALL, INDEPENDENT ISPS

First, I would like to introduce my company to you. NorthNet, an Oshkosh, Wisconsin-based ISP, began operations 4 and ½ years ago with 7 customers. Since that time, we have grown to approximately 2500 dial-up subscribers and hundreds of other customers who use us for Web hosting, Web site design, ASP (application service provisioning) solutions, telecommunications advice, etc. Like so many small to medium sized ISPs, we have acted as midwives and nannies to a whole new generation of Internet users. In fact, we have provided a wide range of Internet education, tech support, and customer service for residential and business Internet consumers throughout our part of Wisconsin.

In addition, we are the proud sponsor of many community services and activities in our part of the world. We work very closely with the following organizations in our area: The Boys and Girls Clubs of Wisconsin, Big Brother-Big Sister, the Oshkosh Seniors' Center, the Oshkosh Public Library, the Oshkosh Public Museum, the Grand Opera Foundation, the University of Wisconsin-Oshkosh to mention a few. I suspect that our story is no different than the 7,000 or so ISPs throughout the United States.

Now, because the cable industry has been able to develop High Speed Internet (HSI) access over their cable lines, they stand poised to rub us out. Why is this so, you may ask? Well, I think one could say the various cable amendments in the Communications Act did not fully anticipate the evolution of the services now being offered by cable companies like Time-Warner/AOL and AT&T. With their closed architecture, these giant corporations now control as much as 90% of all high speed Internet connections to residential customers in the U.S. On the other hand, where issues were foreseen, both the FCC and Congress mandated nondiscriminatory and open interconnection, in Sections 251 and 252 of the Act and in the Open Network Architecture/Comparably Efficient Interconnection rules that apply to telephone companies. The open network model is what fostered the robust competition that exists in the narrow-band market.

In this monopolistic scenario, the most recent round of double talk from AOL Time Warner on open access only underscores the need for the Federal Trade Commission and the Federal Communications Commission to impose legally binding requirements to provide nondiscriminatory access to broadband Internet communications services. The process and substance of this episode repeats a pattern of foot dragging and delay that has kept these systems closed for more than two years.

PROCESS

Two years ago the cable TV industry insisted it should be allowed to provide broadband Internet communications services on the same closed proprietary basis it provides cable TV service. Seven months ago, with its merger under fire, AOL Time Warner made very public promises in their Memorandum of Understanding (MOU) to negotiate access with ISPs on the basis of certain principles. Unfortunately, Time Warner's most recent proposal is, at best, an ever so slightly modified version of the original closed proprietary plan.

Given the cable industry business model and original intentions, this is not surprising. What should be surprising is the fact that Time Warner would send out this Term Sheet in the midst of the intensely scrutinized merger review. Imagine what it will do after the spotlights are off. Simply put, there is no hope for nondiscriminatory access to the broadband Internet through cable modems without a binding obligation to provide open access. The independent ISP community has recognized this and that is why so many of us have come forward, at great economic risk, to voice our concern.

AOL Time Warner claims that the rates, terms and conditions offered by Time Warner to independent Internet Service Providers (ISPs) was only a negotiating position. They are now ready to talk more. You can well imagine that independent ISPs were taken aback when confronted with a Term Sheet that violated the fundamental elements of the MOU promises. How can good faith negotiations take place on such a basis? Moreover, the very first paragraph of the term sheet states explicitly that Time Warner is not bound to deal with ISPs in good faith.

> Except for the provisions of Section 21 [confidentiality] of this Term Sheet, this Term Sheet is not intended to create any rights for, or impose obligation upon, either party, including without limitation any obligation to negotiate in good faith.

Let me point out that the first paragraph of the Memorandum of Understanding issued on February 29th, 2000 states that

> it is the intention of the parties to enter into as quickly as possible a binding definitive agreement to provide broadband AOL service on Time Warner's cable systems, which will be used as a model for the commercial agreements that will be available to other ISPs.

Is this Term Sheet the model agreement that AOL has signed with Time Warner? If not, and there were further negotiations, why wasn't that model put on the table? I wonder if this is the basis on which AOL is willing to deliver broadband Internet service to customers as an unaffiliated ISP on the cable systems it does not own? I suppose that both of your agencies have seen the actual Term Sheet AOL and Time Warner have signed. I am certain that if we had not gone public, there would not have been any movement on their part.

Before I turn to substantive problems in the Term Sheet, there is one more point about the process that I would like to make. Before an ISP even received the Term Sheet it had to go through two other hoops. First, it had to "pre-qualify." That is Time Warner insisted that it be given a great deal of information before discussion started. Moreover, the pre-qualification letter made it clear that the ISPs did not have any right to interconnect, rather Time Warner was picking and choosing who would go on its systems.

> We received your e-mail on August 1, 2000 [my first request for access information was sent March 27th, 2000] and **may** be interested in working

> with you to offer your internet [sic]service over our broadband cable systems. It would be helpful to us, **to determine if you might be a good fit**, if you would provide us with some basic background information regarding your company.
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> - Time Warner areas that you wish to serve; we would expected [sic] you to provide facilities to the Time Warner Cable headed in those areas.
>
> - General information about your company:
>   1. Product offering
>   2. Are you currently offering any broadband services
>   3. Number of subscribers currently served
>   4. How long in business
>   5. Ownership of company
>   6. Basic financial information
>   7. Current service areas
>
> (emphasis added)

You should be able to understand the hesitance of ISPs to provide information about services, subscribers, and service areas to a competitor as a precondition of negotiating access. This letter was followed up with a non-disclosure agreement, which though not uncommon, was extremely onerous. Combine that with a Term Sheet that excuses the offerer from "negotiating in good faith" and contains the outrageous terms and conditions described below, and you will understand why many ISPs are convinced this voluntary process is going nowhere. This context should help you understand why many believed the Term Sheet was not the start of negotiations, but the end and why the ISP community felt compelled to go public about this outrage.

DISCRIMINATION

The MOU was very short on details, but it did declare a series of principles that we think were violated by the Term Sheet.

> The terms of the commercial agreements between AOL Time Warner and ISPs wishing to provide broadband service will not discriminate on the basis of whether the ISP is affiliated with AOL Time Warner.

Entry into cable's High Speed Internet Access: According to the Term Sheet, NorthNet will be required to give an essentially nonrefundable $50,000 deposit to Time-Warner for their promise to allow us access to their cable lines. This is a very expensive pre-condition to a very expensive process: By the time NorthNet has contracted for the necessary infrastructure at Time-Warner's head-end and the transport and backbone services, we will have committed as much as $700,000 before we are able to acquire our first cable Internet service customer.

The home page: Then there is the home screen, which is of course one of the most important starting points for all customer relations on the Internet. The Term sheet mimics the words of the MOU, but then contradicts them.

> ISP will have sole control of, and responsibility (including without limitation editorial and technical responsibility) for the homepage for the Service, provided however that (a) the home page will be subject to TWC's approval; and (b) at all times during the term of the Definitive Agreement there will be a dedicated availability of prominent above-the-fold areas on the home page of the Service for use by the Operator at its discretion, but which may, without limitation link to content, applications, service and functionality by such Operator.

Think for a moment about the tilted competitive playing field that Time Warner is seeking to create. Their ISP gets to be in the middle of my homepage, but mine does not get in the middle of theirs. I compete with them for eyeballs, but they get to look over my storefront and approve it. They also get to advertise prominently in it. Every time I win a customer from them, they get to advertise their competing services and sell it to that customer, right in my shop.

Control of the customer relationship: The Term Sheet also places the unaffiliated ISP at a disadvantage to the affiliated ISP in one of the most important aspects of the customer relationship, control over sensitive information that flows between the ISP and the customer.

> TWC shall use reasonable efforts to comply with ISP's customer privacy policy practices, provided, however that to the extent ISP's privacy policies are inconsistent with, and in some way a limitation on TWC's current and anticipated business use of such information, ISP agrees to take whatever action necessary to modify its policies with respect to conform with TWC's business practices.

As a practical matter, Time Warner has control over the information that flows between the customer and the ISP. Time Warner does not intend to allow this information to flow as mere bits. It wants access to the information content of those bits. The gathering and use of customer information is subservient to Time Warner's business plan. If an ISP wants or successfully builds a business on privacy policy and Time Warner does not like it, it can force the ISP to abandon that business.

The Term Sheet does not stop at asserting control over privacy policy. It inserts itself into my business in a number of other ways that are unacceptable to any independent businessman. Time Warner asserts the asserts the right to sell my service and, perhaps set the price, as well as when to terminate the service.

> Each of ISP and TWC will sell the Service and will determine the pricing of the Service when sold by it.

> TWC will have sole discretion over Subscribers termination policies, include without limitation for non-payment.

Time Warner clearly is not contemplating independent entities using and paying for the use of the network, it is treating all ISPs as subsidiaries to whom it can dictate fundamental business practices. I wonder if Time Warner would give me the same right to sell, set the price for, use the customer information from, and terminate cable TV service?

STREAMING VIDEO

Video streaming has received an immense amount of attention not only because it might compete directly with the cable TV product, but also because it embodies the qualitative leap in functionality and quantum jump in speed that broadband Internet provides.

The MOU said the following:

> AOL Time Warner will allow ISPs to provide video streaming. AOL Time Warner recognizes that some consumers desire video streaming, and AOL Time Warner will not block or limit it.

Again, the Term Sheet mimics the words of the MOU but immediately contradicts them:

> Video streaming and telephony will be permitted as part of the Service, subject to the following provision:
>
> TWC will not be required to provide QoS support for telephony or video streaming for the Service. QoS may be provided upon request and at an additional cost.
>
> To the extent ISP wishes to offer any functionality as part of the Service which: (a) is outside the scope of the Network Architecture; or (b) requires an Operator to acquire equipment or software or implement a change in the way the Operator processes, TWC shall have the right to approve such functionality, provided however that in the event TWC approves such functionality, ISP shall be obligated to reimburse for TWC its direct, out-of-pocket costs in implementing such new functionality.

Video streaming is foreclosed as a threat to Time Warner's services without Quality of Service guarantees. Time Warner asserts complete control over video streaming by controlling the economic terms on which Quality of Service is offered. It can define the functionality to prevent competition. Further, to the extent that an ISP develops or deploys facilities that enhance its video streaming capability, which Time Warner feels is "outside the scope of the Network Architecture," Time Warner wants a right of approval, even if it does not impose a cost on Time Warner. Effectively, it gets to control the video competition.

Time Warner goes on to build a wall around the video market with pricing policy that dissuades ISPs from competing for the Internet business of cable TV customers. Time Warner buttresses that wall with a marketing barrier and a service quality barrier that can further dissuade ISPs from competing for TV customers. The Term Sheet states:

> TWC shall retain seventy-five percent (75%) of gross service subscription revenues and ISP shall receive twenty-five (25%) thereof. Notwithstanding the foregoing, for subscriptions to the lower tier service: (a) TWC shall receive a minimum monthly payment of $30 for each subscription sold by ISP to existing TWC cable television service subscribers.
>
> TWC may package the Service with TWC's other services.
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> The Service will be optimized for the personal computer, but the parties understand that the Service may be capable of working on another device if so connected by a customer. TWC's obligations under the Definitive Agreement will be limited to a customer's use of the Service through a personal computer.

By singling out current cable TV customers for an extremely high floor price for independent ISP broadband Internet service, Time Warner is leveraging its monopoly position in cable into the broadband Internet market. Given current pricing, Time Warner makes it less profitable for any unaffiliated ISP to compete for the broadband Internet service business of Time Warner's cable TV customers who have not yet taken broadband Internet service.[2] Moreover, placing a price floor under what the ISP must pay Time Warner for any cable TV customer that takes broadband Internet service subjects them to the constant threat of price squeeze.

Bundling broadband Internet with cable is reserved for Time Warner. Time Warner gives consumers a discount when it sells a customer both. ISPs do not get a discount if the customer takes both.

Under the service quality conditions, Time Warner can design its network to provide higher quality to the set top/TV set than the PC and still claim not to be discriminating against PC-based applications. Its recent filings indicate that it does not envision being obligated to implement nondiscriminatory access in the set top/TV product space.

COMMERCIALLY REASONABLE TERMS

Beyond the question of whether the Term Sheet violates the MOU is the broader question of whether the terms will allow independent ISPs to deliver service on a commercially viable basis.

Impairing the home page and walling off the cable TV market seriously diminishes the attractiveness of entering this market. In addition to taking at least 75 percent of the subscription revenues, AOL Time Warner takes 25 percent of all ancillary revenues generated by the ISP for "advertising, transactions, communications, premium services, e-commerce, web hosting, and other fees."

To add insult to injury, while Time Warner as the Operator gets 25 percent of my ancillary revenues, "all revenues generated by the Operator in connection with the Service and whether or not through the Service Home Page (including advertising, transactions, communications, premium services, e-commerce and other fees and service revenues) will be retained by TWC. While my service is running on a PC, Time Warner can generate revenues ancillary to my service on its ITV product, and it gets to keep it all. When I generate similar revenues, I only get 75 percent.

Many independent ISPs have concluded that these terms present no reasonable basis for independent ISPs to compete on a commercially viable basis. The MOU was interested in getting "partners" and the pre-qualifying letter talks about making "a good fit." There is no intention or possibility of allowing competitors onto these networks under these terms. By offering terms that are totally unacceptable, Time Warner keeps its network effectively closed.

Moreover, claims by the in-house cable ISPs that this is all they get are not a valid test of nondiscrimination. Because all broadband internet service over cable systems is sold today on an exclusive basis by ISPs that are largely owned by cable operators, their claim simply ratifies anti-competitive transfer pricing. Cable operators lose nothing by establishing excessive prices for the use of facilities, since it all ends up in the same pockets. Onerous conditions for content that prevent competition for video serves the interest of the cable company owners of the affiliated ISPs.

Furthermore, the Time Warner Term Sheet imposes minimum subscriber levels, nonrefundable deposits, contract duration limits and other obligations that are a major barrier to small ISPs.

One place where the Term Sheet is faithful to the MOU is in refusing to allow independent ISPs to offer services until after the current exclusive contract expires. This time lag would ensure Time Warner that it would capture the vast majority of the first generation of broadband Internet customers on an exclusive basis. With the most attractive customers in hand, and a host of sticky features and switching costs imposed onto the customer, it will have a huge leg up in any future competition. Delaying competition further undermines the prospects that it will be workable.

What we have experienced in the past seven months is not good faith commercial negotiations, but instead it is the classic response of a monopolist pricing policy. The goal is to placate policymakers like yourselves in the middle of a high visibility regulatory proceeding, without losing control over the marketplace. We know what will happen after the merger is approved, if there is no binding legal obligation to provide open access. Time Warner will go back to that term sheet or some variant of it that restricts head-to-head competition with their products in both the cable TV and the broadband Internet product space.

Leo Hindery, former cable executive for TCI and then AT&T, identified the problem for cable companies and government regulators in an interview for CNET News back on April 18th, 2000. In spite of the fact that he owned approximately 4 million shares of AT&T at the time, Mr. Hindery stated that

> open access is the *sine qua non* [essential element] to a responsible relationship with regulators as well as consumers. And any appearance or action that is contrary to that is grossly inappropriate. The Internet's strength is its openness, its non-discriminatory nature. And no one should be precluded by gatekeepers from having their content readily available to all customers. **It's bad business. It's bad customer relations, and I think it may in fact be unethical.**

The only beneficiaries of the FCC's current *laisez faire* policies toward the closed architecture of cable companies have been cable companies who are selling their cable subscribers to larger cable companies and content providers who are selling proprietary content to the same large cable companies. Therefore, I am asking you to re-orient the industry toward the same type of open competitive market that has created the remarkable success of the Internet.

II. NON-DISCRIMINATORY, OPEN ACCESS

Having outlined the problem, let us turn to the solution.

GENERAL PRINCIPLE OF NON-DISCRIMINATORY OPEN ACCESS

The provision of broadband access is a separate service from broadband-based Internet service.[3]

- Open access involves the technical conditions of interconnection between a network owner/operator providing telecommunications service to an Internet service provider on reasonable rates terms and conditions.

As evidenced so clearly in the Time Warner Term Sheet and the AOL MindSpring Letter, cable system owners have tried to control, dictate or influence the ISP business. This includes marketing (e.g. reservation of advertising space), pricing (especially bundling opportunities), content (e.g. home page), information gathering (e.g. privacy), or the types of services offered by an ISP (especially video streaming functionality). These efforts must be rejected in an open access regime. They involve Internet service, not access.

- ISPs should be allowed to negotiate individual agreements within the context of a mandatory obligation for cable system owners to provide nondiscriminatory access to their communications networks. [4]

Although the cable industry has claimed that interconnection is an extremely difficult technical matter, its feasibility has been demonstrated by trials and commercial open access cable operators in the U.S. and abroad. AOL pointed out that open access is simply a physical connection between two networks that could be quickly implemented.[5] We would add that the Commission has a great deal of experience with the mechanisms necessary to ensure nondiscriminatory interconnection in the telecommunications environment.

- When the Commission establishes an obligation to provide nondiscriminatory access as a telecommunications service, it should reference and rely on the criteria and standards already developed in the telecommunications area so that it can quickly implement a program of open access.

- Dispute resolution to resolve disputes under the existing telecommunications standards would also accomplish the goal of establishing regulatory symmetry between the dominant high-speed Internet access networks. The Commission has a process for resolving industry disputes at the Enforcement Bureau.

TECHNICAL CONDITIONS OF INTERCONNECTION

Legitimate questions about traffic management in a shared network should be handled in a competitively neutral manner. AOL identified a number of specific solutions that were available to accomplish open access.[6] It is clear that the AOL list of a year ago does not exhaust the range of possibilities and that new issues will arise as the network evolves. Therefore, the general principles that the Commission should adopt are as follows.

- Internet service providers should be allowed to interconnect with cable networks in the most efficient, technically feasible manner available to meet their needs.

- The Commission should establish a process in which cable operators work with Internet service providers to expand the number of ISPs that can be accommodated and the mechanisms for managing traffic in a technically neutral manner.

An industry trade association, such as cable labs, is not an appropriate standards setting body since it is responsive to the private interests of network owners, not the common interests of network owners, service providers and the public.

As AOL argued to local governments and the FCC itself, network and traffic management concerns must not be allowed to prevent the development of products, such as streaming video, that compete with cable TV video products.[7] The Time Warner Term Sheet makes it clear that cable network owner efforts to control or prevent competition for services will be far reaching.

Internet service providers are constantly developing new functionalities and services. Because the narrow-band network has been neutral, these innovations have flowed through to the consumer in a seamless manner. The Time Warner Term Sheet seeks to control the development of functionality and service, which will inevitably obstruct its flow to the public. It restricts the services ISPs can offer to the public and requires prior approval of new functionalities, even where they impose no network modifications or costs on the cable network.

- ISPs should be free to provide any service that is compatible with the chosen form of interconnection without prior approval from the network owner, so long as the network or service to other users or providers is not threatened.

- The network owners should make technically feasible and reasonable modification to accommodate new functionalities and be compensated for the costs incurred.

- ISPs should be required to provide only the minimum technical information necessary to implement new functionalities and services in a manner that does not disrupt network management.

- Information for network management purposes should not be used by network owners to develop competing services.

- Data passing to or from a customer to a competitive Internet Service Provider shall be considered private and proprietary and may be logged or analyzed by the cable network provider for network management only.

WHOLESALE RATES FOR INTERCONNECTION

The Commission is well aware that the cable TV business model is not based on open access principles and it should recognized that the cable TV pricing model is not compatible with an open access regime. As evidence in the Time Warner Term Sheet and reflected in negotiations with AT&T, cable operators are seeking to take what is tantamount to an equity position in all ISPs by requiring a huge percentages of both subscriber fees and a substantial share of all ancillary revenues. This is just a slight modification of the cable TV model. It will destroy the vigorous competition and incentive for innovation that has characterized the Internet.[8]

The magic of the narrow-band Internet is not in the wires, it is in the content/services developed by thousands of ISPs, which was reinforced and supported by the assurance that network operators could not interfere with content suppliers. If the Commission intends to create true competition on the broadband Internet and preserve the remarkably dynamic innovation that has typified the narrow-band Internet, open access pricing must be based on wholesale transportation tariff principles, just as it has been on the narrow-band Internet.

Furthermore, keeping in mind that the network owner operator will also be allowed to own affiliated ISPs, the Commission must establish a context in which affiliated ISPs are required to compete head-to-head with independent ISPs in the content/service business on a level playing field. If the Commission allows the owner/operator to stake any claim to highly valuable content/service that an unaffiliated ISP develops, then the incentive to develop such content is undermined. The incentive to innovate is reduced both for the independent ISP, who is not allowed to capture the full value of his endeavor, and for the network owner operator, who is guaranteed a share of any successful content no matter who develops it.

- ISPs should be required to pay only reasonable fees for the services they consume and the network owner/operator should be allowed to earn a reasonable return for the services provided.

Because broadband Internet service on cable networks has been sold under complete exclusion of competition from the cable network, there are no easy market referents for establishing a reasonable cost/price of access. Therefore,

- The Commission should require a cost basis for the establishment of these rates.

If the Commission does not wish to conduct a cost proceeding, it should rely on the existing leased access rates for cable channels, a procedure that has been fully litigated and implemented.

- In this approach, the maximum rate for ISP use of 6 MHz of spectrum should be set at the maximum implicit price paid by any entity for leased access to 6 MHz of spectrum for the delivery of cable programming.

If the Commission is unwilling to conduct a cost proceeding or to rely on the existing rates for spectrum under the leased access proceeding, then the rates must be set based on publicly available retail rates.

- In this approach, rates should be set as a percentage of the lowest price for broadband Internet service offered to the public, not to exceed $10 per month.

This approach sets a ceiling that is reasonable[9] and serves two purposes that are critical to nondiscriminatory access and fair competition.

By basing the rate on a publicly available price, it accomplishes transparency and prevents discrimination between ISPs. Secrecy is the cornerstone of discrimination, as the recent Time Warner Term Sheet demonstrates.

By basing the rate on the lowest available retail price, this approach limits obvious price squeezes. If the Commission allows the network owners to set a price without reference to the lowest price charged to the public, the network owner/operator can immediately squeeze competition by lowering its retail price. The Time Warner Term Sheet, which established a high floor price for some classes of customers was a blatant invitation to price squeeze. We have already had disputes about price squeeze in for DSL service and resold telephone service.

BUSINESS RELATIONSHIPS

Although Interconnection is a technical matter that can be effectuated by joining two wires in a router at the head-end, there are inevitably other ways in which the customer will have to interact with both the cable network owner and the Internet service providers. The Commission must ensure that network owners treat ISPs in a nondiscriminatory and competitive neutral manner in these business relationships.

For example, as cable TV and Internet services are provided over the same network, the customer is likely to encounter a network boot screen in which the customer chooses the type of service and the service provider for the individual session. ISPs must be treated fairly on that boot screen. The customer will then click to the home page of the ISP. That home page must be under the control of the ISP. All activities and transactions conducted through that home page are the business of the ISP, not the network operator. The Time Warner Term Sheet is blatantly anti-competitive in its proposed controls on the business of independent ISPs that have no relationship whatsoever to interconnection and network management.

- ISPs should receive fair treatment on the network boot screen.

- ISPs should control their home page and all transactions conducted through that home page.

- Other than information necessary for billing purposes, information generated in the course of doing business with the customer belongs to the customer or the ISP (subject to privacy policy), not to network operator.

Beyond the question of the boot screen and home page, in the Time Warner Term Sheet and the AT&T MindSpring letter before it, cable owners seek to usurp control of the customer from the ISP.

- ISPs should control their own privacy, Digital Millenium Copyright Act and customer termination policies.

CONCLUSION

The Internet has proven to be a dramatic engine of economic and technological progress in the U.S. precisely because it unleashed the dynamic forces of competition in our economy. The cornerstone of that competition was direct access to the customer over networks that were operated in an open, non-discriminatory manner. For thirty years, innovators and entrepreneurs were freed from the straight-jacket of a monopoly network by vigorous policies to prevent network control from being used to serve the strategic interests of the network owner.

That freedom to innovate is at risk in this merger and on the broadband Internet in general. The intention of the new network monopolists to use their ownership of the communications facilities to defend their market power over cable and extend it to the broadband Internet is abundantly clear in the Time Warner Term Sheet and the AT&T MindSpring letter. In the case of the AOL Time Warner merger, the leverage being exercised is reinforced by the pervasive vertical integration into content. The Commission must act, immediately, to restore the policy of openness that has served the nation so well by requiring open access as a condition of the merger.

END NOTES

[1] America Online Inc., "Open Access Comments of America Online, Inc.," before the Department of Telecommunications and Information Services, San Francisco, October 27, 1999 (hereafter, AOL).

[2] Time Warner currently charges $39.95 for broadband Internet service to cable customers, leaving, at most a $9.95 margin for the unaffiliated ISP if it wants to remain price competitive. If Time Warner drops its price, the unaffiliated ISP would have an even smaller margin. Time Warner charges $50 for broadband service for non-cable customers. This gives the unaffiliated ISP a margin of $12.49 (.25 x $49.95) to work against.

[3]The Circuit Court ruling in *AT&T Corp. v. City of Portland*, No. 99-35609, 2000 U.S. App. LEXIS 14383 (9th Cir. June 22, 2000) makes it clear that, consistent with the basic/enhanced service approach, one must look separately at the network and the services provided over the network.

> Under the statue, Internet access for most users consists of two separate services. A conventional dial-up ISP provides its subscriber access to the Internet at a "point of presence" assigned a unique Internet address, to which the subscribers connect through telephone lines. The telephone service linking the user and the ISP is classic "telecommunications," which the Communications Act defines as "the transmission, between or among points specified by the user, of information of the user's choosing, without change in the form or the content of the information as sent and received." A provider of telecommunications services is a "telecommunications carrier," which the Act treats as a common carrier to the extent that it provides telecommunications to the public, "regardless of the facilities used…"
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> ISPs are themselves users of telecommunications when they lease lines to transport data on their own networks and beyond on the Internet backbone. However, in relation to their subscribers, who are the "public" in terms of the statutory definition of telecommunications service, they provide "information services," and therefore are not subject to regulation as telecommunications carriers. Like other ISPs, @Home consists of two elements: a pipeline (cable broadband instead of telephone lines), and the Internet service transmitted through that pipeline. However, unlike other ISPs, @Home controls all of the transmission facilities between its subscribers and the Internet. To the extent @Home is a conventional ISP, its activities are one of an information service. However, to the extent that @Home provides its subscribers Internet transmission over its cable broadband facility, it is providing a telecommunications service as defined in the Communications Act.
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> Among its broad reforms, the Telecommunications Act of 1996 enacted a competitive principle embodied by the dual duties of nondiscrimination and interconnection. See 47 U.S.C. s. 201 (a) 251 (A) (1)… Together, these provisions mandate a network architecture that prioritizes consumer choice, demonstrated by vigorous competition among telecommunications carriers. As applied to the

Internet, Portland calls it "open access," while AT&T dysphemizes it as "forced access." Under the Communications Act, this principle of telecommunications common carriage governs cable broadband as it does other means of Internet transmission such as telephone service and DSL, "regardless of the facilities used."

Even if the Commission is not ready to embrace the proposition that the cable "pipeline" is a telecommunication facility, the essential point is that policy of open telecommunications networks, including the mandate for nondiscriminatory interconnection pursuant to ONA/CEI is what has largely allowed the "narrowband" Internet to be as vibrant and competitive as it is today. It is hard to see how closed cable networks can obtain the same result in a broadband environment.

[4] As AOL explained in San Franscisco

> The City's critical and appropriate role is to establish and firmly embrace a meaningful open access policy, not to manage the marketplace. We believe that once such a policy is fully in place, the industry players will negotiate the details to fairly implement open access. The City thus should not have to play an active role in enforcing non-discriminatory pricing or resolving pricing disputes. Rather, the City should simply adopt and rely on a rule that a broadband provider must offer high speed Internet transport services to unaffiliated ISPs on the same rates as it offers them to itself or its affiliated ISP(s). The City's unequivocal commitment to this policy and the resulting public spotlight should offer enforcement enough, and indeed we expect that cable operators will adjust their ways readily once they understand that a closed model for broadband Internet access will not stand. When necessary, the opportunity to seek injunction or bring a private cause of action would offer a fallback method of obtaining redress…
>
> As stated above, the City's role is to establish a comprehensive open access policy with an effective enforcement mechanism. Network management issues are best left to the industry players, and the City need not play a hands-on role in this area. The companies involved are in the best position to work out specific implementation issues. This is not to say, however, that a reluctant provider would not have the ability to interfere with the successful implementation of an open access regime. Accordingly, through its enforcement policy if necessary, the City should ensure that the necessary degree of cooperation is achieved. (AOL, pp. 4-5).

[5] AOL made the following argument in San Francisco.

> *Non-discrimination requirements:* Franchisee shall immediately, with respect to this franchise, provide any requesting Internet Service Provider access to its broadband Internet transport services (unbundled from the provision of content) on rates, terms and conditions that are at least as favorable as those on which it provides such access to itself, to its affiliates, or to any other person. Such access shall be provided at any point where the Franchisee offers access to its affiliate. Franchisee shall not restrict the content of information that a consumer may receive over the Internet…

Of course, it is implicit in the open access resolution that non-discriminatory access for multiple ISPs extends to all relevant aspects of the technical and operational infrastructure, so that all business system interfaces will be open to all ISPs and performance levels will not favor the affiliated ISP. (AOL, p. 7)

Access: The term "access" means the ability to make a physical connection to cable company facilities, at any place where a cable company exchanges consumer data with any Internet service provider, or at any other technically feasible point selected by the requesting Internet service provider, so as to enable consumers to exchange data over such facilities with their chosen Internet service provider (AOL, p. 2).

Broadband Internet Transport Services- The term 'broadband Internet access transport services" means broadband transmission of data between a user and his Internet service provider's point of interconnection with the broadband Internet access transport provider's facilities. (AOL, p. 3)

[6] There are at least three possible network designs that allow for open access. These include:

policy-based routing, which routes packets to the appropriate ISP using the source IP address as the unique identifier;

virtual private networks (VPNs) and IP tunnels, which create virtual dedicated connections over the HFC network between the customer and the ISP (a solution appropriate to routed (layer 3); and

Point-to-Point Protocol over Ethernet (PPPoE) encapsulation, which is a protocol analogous to commonly employed designs for dial-up (a solution appropriate to bridged (layer 2) access networks).

Each of these options has its own unique set of advantages and disadvantages. The appropriateness of each option varies depending on the type of cable system (i.e. large or small, multiple nodes vs. single node) and the networking architecture being addressed. (AOL, p. 7-8)
It is important to confirm that the cable operator must provide equal treatment for local content serving (caching or replication) that the affiliated and nonaffiliated ISPs can provide, specifically, no firewalls, protocol masking, extra routing delays or bandwidth restrictions may be imposed in a discriminatory manner. (AOL, p. 9)

[7]At the federal level, AOL's most explicit analysis of the need for open access can be found in "Comments of America Online, Inc.," *In the Matter of Transfer of Control of FCC Licenses of MediaOne Group, Inc. to AT&T Corporation,* Federal Communications Commission, CS Docket No. 99-251, August 23, 1999

> What this merger does offer, however, is the means for a newly "RBOC-icized" cable industry reinforced by interlocking ownership relationships to (1) prevent Internet-based challenge to cable's core video offerings; (2) leverage its control over essential video facilities into broadband Internet access services; (3) extends it control over cable Internet access services into broadband cable Internet content; (4) seek to establish itself as the "electronic national gateway" for the full and growing range of cable communications services. (AOL, FCC, p.4)

A similar sentiment was expressed in the comments in San Francisco

> In a last mile shared environment, proper network and bandwidth management might possibly require certain limitations on data transmission. However, content- or service-specific restrictions can be both over- and under-inclusive – and most of all, anti-consumer. Limitations on video streaming, for example, protect cable's traditional video programming distribution business. TCI admitted early on, its 10-minute cap is a "restriction which we imposed on @Home so that we were the determiner of how stream video works in our world… [and] so that [we] determined [our] future in the area of streaming video." Any legitimate network management policies must be free of such anti-competitive intent and effect. (AOL, p. 10)

[8] The Internet's protocols themselves manifest a related principle called "end-to-end": control lies at the ends of the network where the users are, leaving a simple network that is neutral with respect to the data it transmits, like any common carrier. On this rule of the Internet, the codes of the legislator and the programmer agree.

[9] The $10 figure would seem to be a reasonable estimate of the network costs attributed to Internet service in cable company pricing. Cable operators charge $40 for Internet service when it is bundled with cable TV service, but $50 when it Internet service is purchased on a stand alone basis. Basic cable TV rates are about $30 per month, of which about $12 is EBDITA, available for servicing fixed network costs.